

# Efficiency and Effectiveness in the North Atlantic Region

## A Review and Discussion

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Regional Climate Services Director, Eastern Region





# Discussion Points

- What's NOAA doing on climate in the region?
- Who are the different players? Are there common goals and common structures?
- Higher-level efforts, and how we feed in
- Opportunities to compliment one another and increase efficiency
- How can we move forward in the same direction?



# **NOAA REGIONAL CLIMATE ACTIVITIES**

# Connecting Science, Services and People: NOAA's Regional Climate Service Enterprise

## State and Local Engagement, Education & Service Delivery

- Weather Forecast Offices
- Sea Grant Education & Extension
- Marine Sanctuaries, Monuments & Estuarine Reserves
- River Forecast Centers
- Data Centers
- DOC Commerce Connect (in development)
- Other agencies (e.g., National Science Foundation, Dept. of Education, Health & Human Services, Dept. of Energy, Dept of Interior, Dept of Agriculture)
- Dept. of Agriculture Extension
- State Climatologists
- Federal Protect Area Programs
- USGCRP Climate Literacy Partners
- Etc...

## Regional Climate Services Partnerships

- NOAA Regional Climate Service Programs
  - Weather Service Regions
  - Regional Climate Centers
  - Coastal Services Center
  - River Forecast Centers
  - Regional Collaboration Teams
  - Data Centers
- Relevant Regional Offices from other agencies (e.g., Environmental Protection Agency, Dept. of Agriculture, Dept. of Interior, Health and Human Services, Dept. of Transportation, Dept of Energy, etc.)

## Regional Climate Science

- Regional Integrated Science & Assessments (RISA)
- NOAA Labs
- Sea Grant
- Cooperative Institutes
- Applied Research Centers
- Data Centers
- Other agencies (e.g., National Aeronautics and Space Administration, Dept. of Interior, Dept. of Agriculture, National Science Foundation & other USGCRP agencies)
- Etc...

## USER ENGAGEMENT

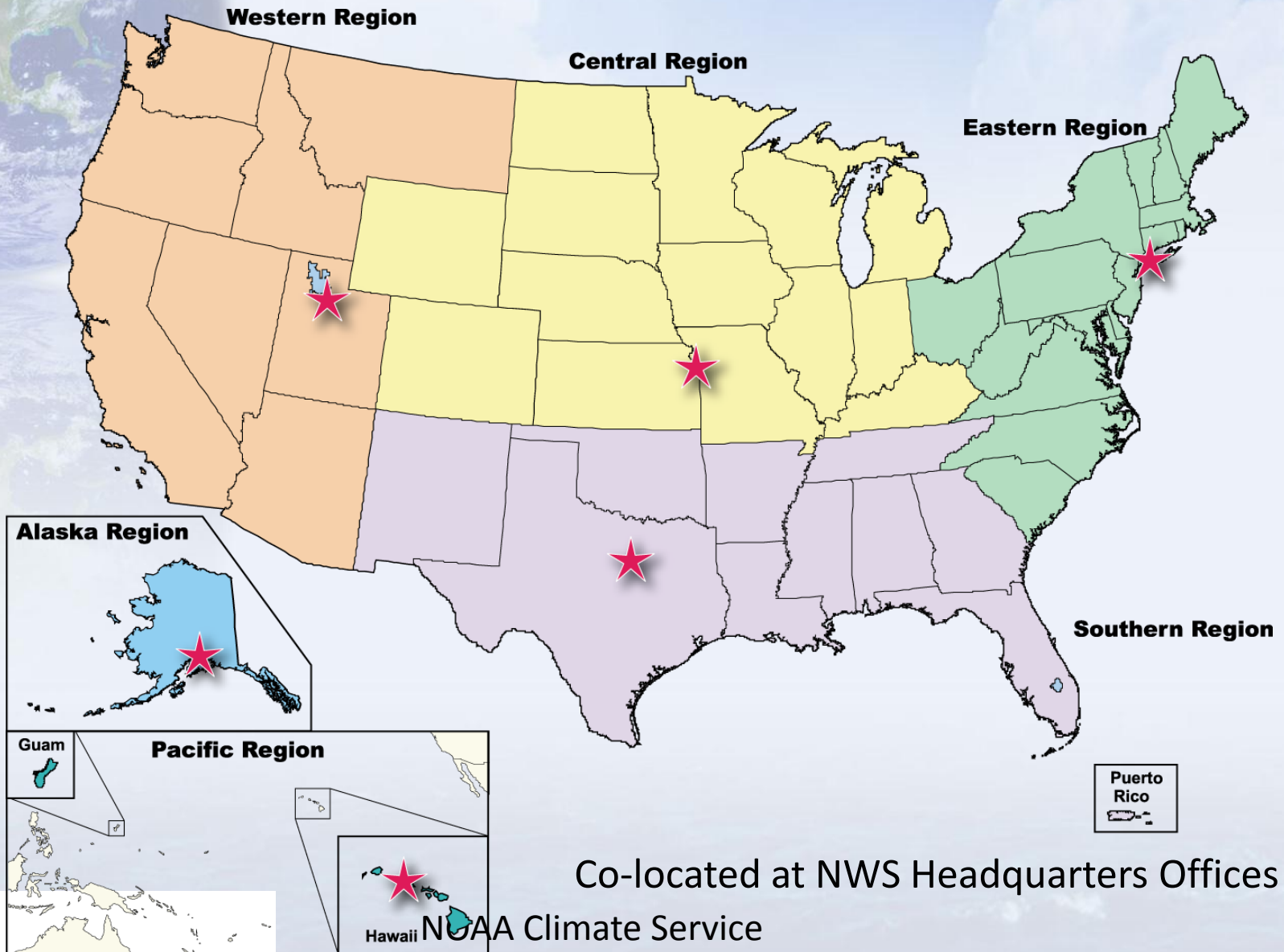
- Development, Delivery & Evaluation of Products & Tools
- Understanding and Translating User Needs
- Informing Program Requirements



Government  
Private Sector  
Academia  
NGO's

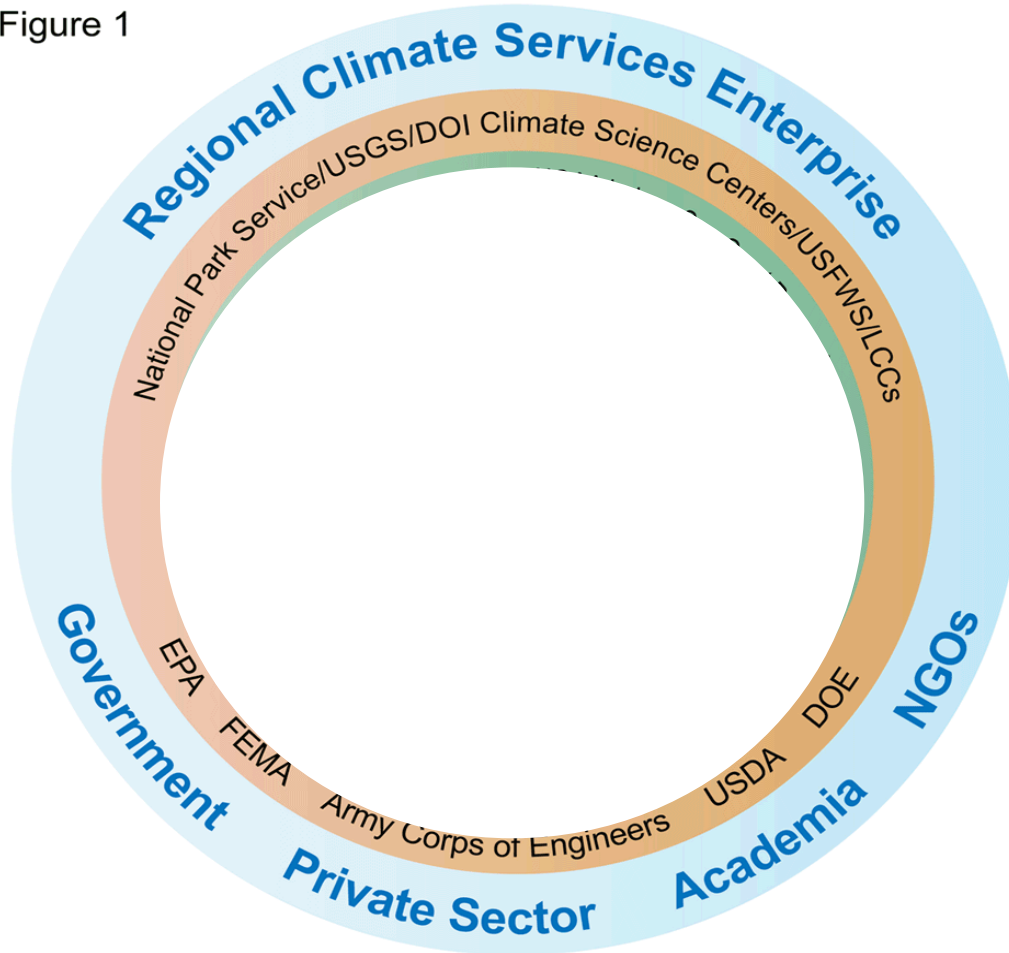


# Regional Climate Service Directors



# Regional Climate Services and NOAA

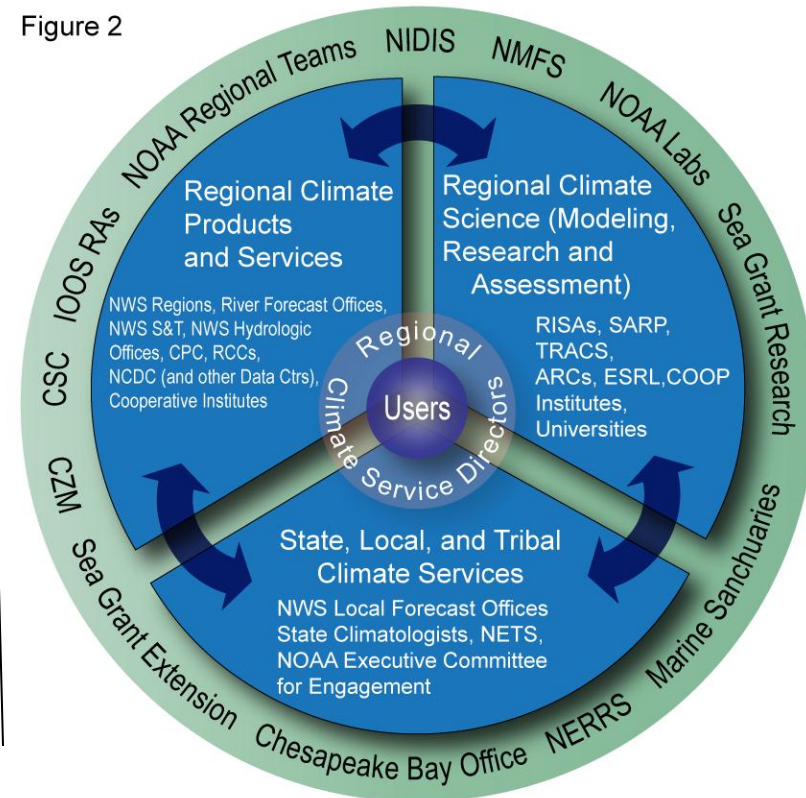
Figure 1



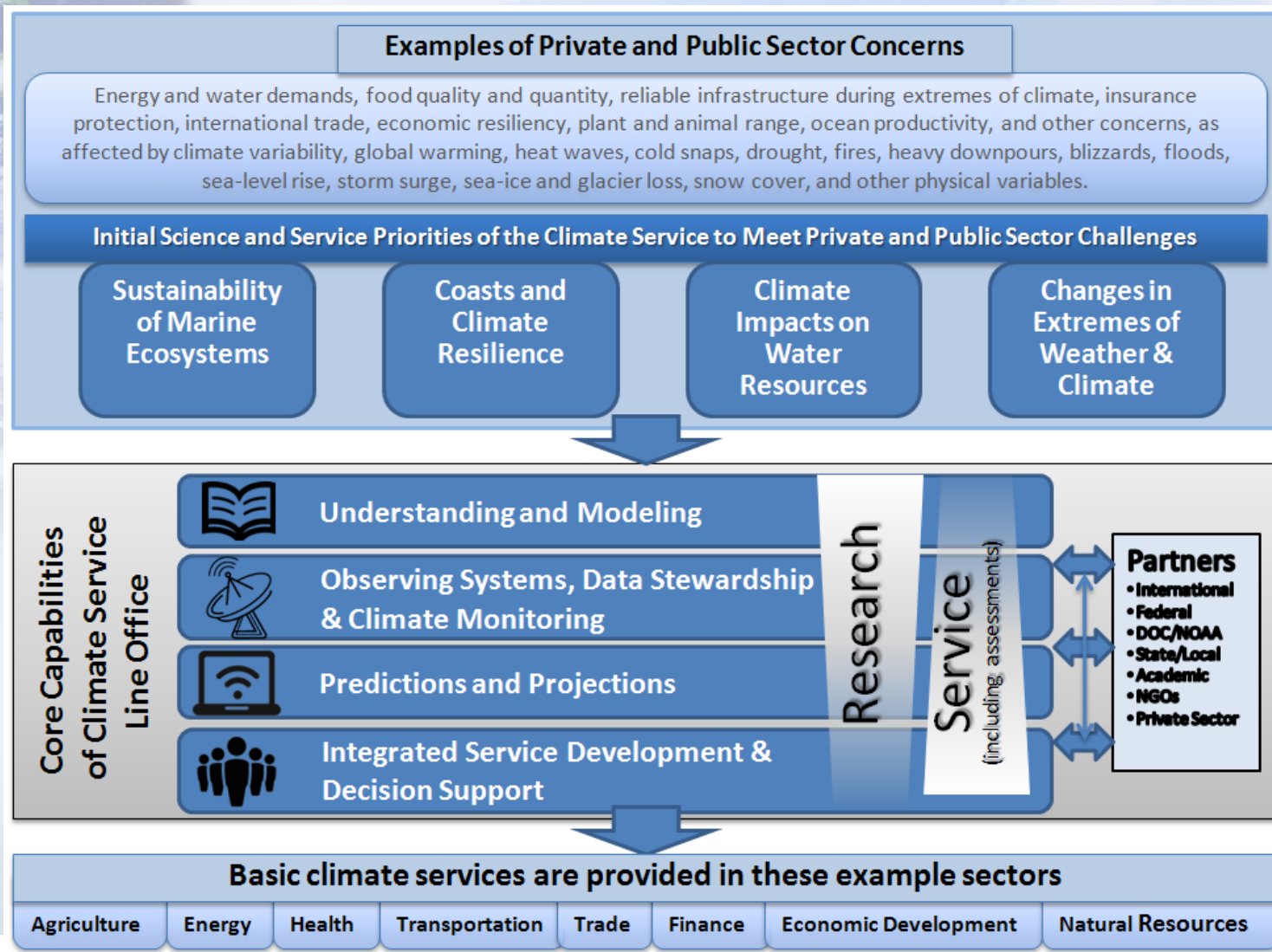
Regional Steering Committee (non-NOAA)

## Regional Coordination Team (NOAA)

Figure 2



# Climate Service Core Capabilities Address Societal Challenges





# NOAA's Climate Services Portal

<http://www.climate.gov>

NOAA HOME WEATHER OCEANS FISHERIES CHARTING SATELLITES CLIMATE RESEARCH COASTS CAREERS

**NOAA CLIMATE SERVICES**  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Explore: [ClimateWatch Magazine](#) [Data & Services](#) [Understanding Climate](#) [Education](#)

**Past & Present Climate** ▶  
  
**Climate at a Glance**  
Read and explore summaries and digests of recent climate-related phenomena from NOAA's distributed climate service community.

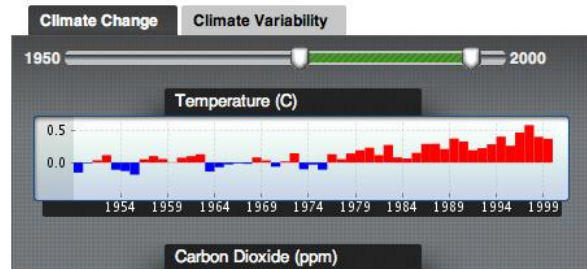
**Outlooks** ▶  
  
**Looking Ahead**  
Discover explorations short-term evaluations of how climate phenomena are likely to unfold in coming days, weeks, and months.

**US & Global Regions** ▶  
  
**Explore NOAA by Region**  
Explore the climate services and products NOAA experts prepare for specific regions of our nation and the world.

**Serving Society** ▶  
  
**Utilizing Climate Data**  
Climate information is essential for business and community planning. These resources focus on needs of specific sectors of society.

**Data Library** ▶  
  
**Visualizing & Explore**  
NOAA is a leading provider of access to data from research projects, stations, and satellites to the nation and the world.

## Global Climate Dashboard



**Past  
Weather**

## News

### NOAA: September Temperature Above-Average for the U.S.

The average September temperature of 66.4 degrees F was 1.0 degree F above the 20th Century average. Precipitation across the contiguous United States in September averaged 2.48 inches, exactly the 1901-2000 average.

Thu, 08 Oct 2009

The NCS Portal Prototype offers one well-integrated, online presentation of NOAA's climate data & services.

The prototype features four audience-focused sections:

- **ClimateWatch** for the public
- **Data & Services** for scientists and data users
- **Understanding Climate** for policy leaders
- **Education** for educators & students

The **Dashboard** is a data-driven synoptic overview of the state of the global climate system.

**Past Weather** allows users to easily retrieve weather data for any given location & date.





# **THE PLAYERS: COMMON GOALS AND COMMON STRUCTURES**

# No single agency can provide the answers

Observations & Monitoring

Research, Modeling & Assessments

Climate Services  
(Feds, States, Academia, NGO's)

Resource Risk Management

Adaptation & Mitigation

# Observations & Monitoring



Climate Science

Research, Modeling  
& Assessments



Climate Services  
(*Feds, States,  
Academia, NGO's*)

Adaptation & Mitigation

# State coordination needed





# NGO coordination needed

**NWF**  
*(wildlife)*

**NEAFWA**  
*(fish and wildlife)*

**NESCAUM**  
*(air and environment)*

**TNC**  
*(nat resources,  
biodiversity)*

**NEIWPCC**  
*(rivers and water)*

**NERACOOS  
MACOORA**  
*(ocean obs)*

The background of the slide features a composite image. On the left side, there are two overlapping, semi-transparent images of the Earth, showing the Americas. The rest of the background is a light blue sky filled with soft, white clouds.

# **WHERE DOES IT ALL GO?**

## **HIGHER LEVEL EFFORTS: THE NATIONAL ASSESSMENT**

# The National Climate Assessment

## Section 106 of GCRA: Scientific Assessment

On a periodic basis (**not less frequently than every 4 years**), the Council, through the Committee, shall prepare and submit to the President and the Congress an assessment which –

- **integrates, evaluates, and interprets the findings of the Program and discusses the scientific uncertainties** associated with such findings;
- **analyzes the effects of global change** on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and
- **analyzes current trends in global change, both human-induced and natural**, and projects major trends for the subsequent 25 to 100 years.



# Assessment History

Nov 1990

The Global Change Research Act is incorporated.



2000

First National Assessment



2009

Global Climate Change Impacts Report



2013

Scheduled release of next National Climate Assessment

1990's

2000's

2010's

1997 - 2003

Workshops and assessment reports for 14 regions



2004-2008

21 Synthesis and Assessment Products

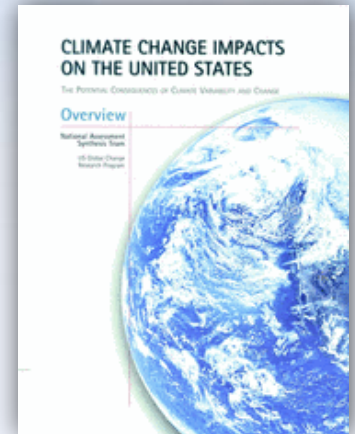


# The First National Assessment

Published in 2000

The National Assessment of the Potential Consequences of Climate Variability and Change

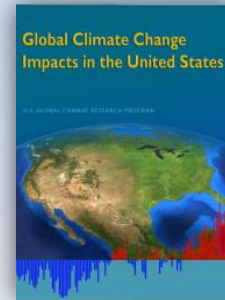
- What was this Assessment?
  - A landmark in the major ongoing effort to understand what Climate Change means to the U.S.
  - Began the national process of research, analysis, and dialogue about:
    - Climate variability and change
    - The impacts of climate variability and change
    - What Americans can do to adapt to an uncertain and continuously changing climate
  - Built on a solid foundation of science conducted as part of the USGCRP
- Who was responsible?
  - Written by the National Assessments Synthesis Team (NAST)
    - An advisory committee chartered under the Federal Advisory Committee Act
    - A committee of 14 experts drawn from governments, universities, industry, and non-governmental organizations
    - Responsible for the broad oversight of the Assessments, with the Federal agencies of the USGCRP



# Global Climate Change Impacts in the United States

Report released in June 2009 in a  
White House press briefing

The report breaks down climate change impacts on the U.S. into:



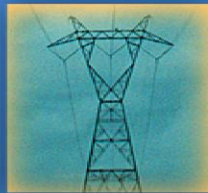
- **9 regions:**

- Northeast, Southeast, Midwest, Great Plains, Southwest, Northwest, Alaska, Islands, Coasts

- **7 sectors:**



Water  
Resources



Energy Supply  
and Use



Transportation



Agriculture



Ecosystems



Human  
Health



Society

- Concludes with **“An Agenda for Science”**
- **[www.globalchange.gov/publications](http://www.globalchange.gov/publications)**



# **The New National Climate Assessment: Mission**

...to establish a continuing, inclusive National process that:

- 1) synthesizes relevant science and information
- 2) increases understanding of what is known and not known
- 3) identifies information needs related to preparing for climate variability and change, and reducing climate impacts and vulnerability
- 4) evaluates progress of adaptation and mitigation activities
- 5) informs science priorities
- 6) builds assessment capacity in regions and sectors.

**First major Assessment report by June, 2013**



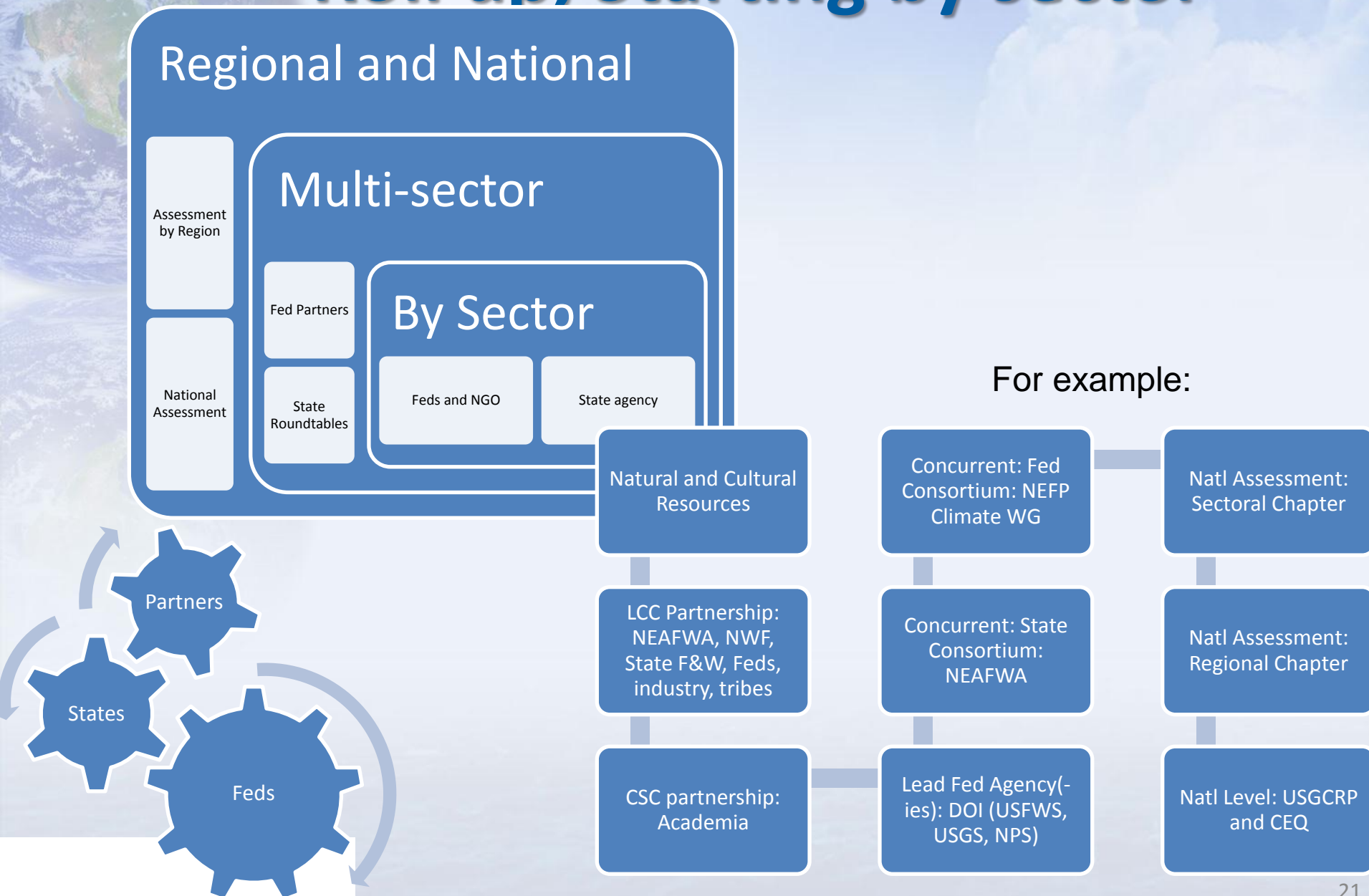
# **OPPORTUNITIES FOR EFFICIENCY AND HOW WE MOVE FORWARD**



# Discussion Ideas

- Unify with regional steering groups?
  - Federal Partners (all agencies, climate sub-team)
  - State Partners (all agencies, governor's support)
- Sub-committees by sector?
  - agriculture, wildlife, coastal, urban, health, infrastructure, fisheries, others...
- Role of NGO's?
  - Pull together by sector?
- Role of academia?
  - Address regional and sectoral research needs
- Role of non-traditional partners?
  - Industry
  - Tribes

# Roll up, Starting by sector





# Roll up, Starting by Sub-Geography

- Upland- forests, headwaters, agric., wildlife, land cover, impervious surfaces
- Rivers/mainstem- anad. fish, water quantity/quality, riparian buffers
- Estuarine- anad. fish, coastal communities, runoff, sea level rise, sw intrusion, wetlands
- Blue water- marine fisheries, CMSP, energy siting, leasing rights
- Sort players by jurisdiction, management authorities (states-3-7mi; Feds- 200mi)
- FedPartners, State Roundtables, NGO/Academia/Tribes/Industry join groups as interested.

